

# Comparisons of Job Characteristics

**Focus Occupation:** [Architectural and Engineering Managers \(11-9041\)](#)

**Associated Occupation:** [Aerospace Engineering and Operations Technicians \(17-3021\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 83

**Focus Occupation:** Architectural and Engineering Managers (11-9041)

**Associated Occupation:** Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	23.6	23.2	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	17.3	16.9	0	Current knowledge level may be sufficient
Mechanical	6.8	17.3	10.4	<<	Extensive education and/or training may be required
Production and Processing	6.0	13.2	10.7	<	Expanded education and/or training may be required
Public Safety and Security	6.9	13.2	10.0	<<	Extensive education and/or training may be required
Design	5.2	12.2	19.0	>>	Current knowledge level is likely more than sufficient
Law and Government	5.9	10.7	8.6	<	Expanded education and/or training may be required
Physics	4.3	9.7	13.0	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 31

**Focus Occupation:** Architectural and Engineering Managers (11-9041)

**Associated Occupation:** Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Quality Control Analysis	5.9	11.1	7.0	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	11.0	4.4	<<	Extensive development of skills in this area may be required
Science	4.5	9.7	8.7	<	A higher skill level may be required

Troubleshooting	4.5	9.2	2.6	<<	Extensive development of skills in this area may be required
Equipment Maintenance	3.5	8.9	1.0	<<	Extensive development of skills in this area may be required
Repairing	3.4	7.2	1.0	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	6.1	1.0	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	13.6	13.9	0	Current ability level may be sufficient
Information Ordering	9.9	11.6	12.0	0	Current ability level may be sufficient
Visualization	7.5	10.1	10.1	0	Current ability level may be sufficient
Flexibility of Closure	7.8	9.6	7.9	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	8.7	6.6	<<	Extensive improvement in abilities may be required
Hearing Sensitivity	5.6	8.1	5.6	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 66

Focus Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Work Activities	Exclusivity of Activity
Communicate technical information	4
Confer with engineering, technical or manufacturing personnel	25
Evaluate engineering data	60
Prepare technical reports or related documentation	22
Read blueprints	10
Read schematics	34
Read technical drawings	7
Understand engineering data or reports	48
Understand technical operating, service or repair manuals	6
Use scientific research methodology	21

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 46

**Focus Occupation: Architectural and Engineering Managers (11-9041)**

**Associated Occupation: Aerospace Engineering and Operations Technicians (17-3021)**

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Indicating and recording instruments	2
Industry specific software	1
Pressure measuring and control instruments	10
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Vision protection and accessories	3

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.